

Work Order ID 93872

\*93872\*

Page 1

Item ID: D206-642-541

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Replacement Skidtube

Start Date: 27/11/2012 Start Qty: 1.00

\*1\*

Cust Item ID:

Required Date: 06/12/2012 Req'd Qty: 1.00

\*1\*

Customer:

Reference:

Approvals:

Process Plan:

MLS

Date: 12-11-27 Tooling:

Date:

Run Start \*NR1\*

QC:

Date: SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D3274

D

0.00

0.100

\*100\*

DOCUMENT CONTROL

DC

0.00

Memo

Document Control

Photocopy bluefile & type labels per PPP D206-642-541

CHG003

B93872

Work Order ID 93872

\*93872\*

Page 2

Item ID: D206-642-541

Accept

\*N9000040100\*

Setup Start \*NS1\*

Revision ID:

Item Name: Replacement Skidtube

Stop \*NS2\*

Start Date: 27/11/2012 Start Qty: 1.00

\*1\*

Cust Item ID:

Required Date: 06/12/2012 Req'd Qty: 1.00

\*1\*

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start \*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

110

0.00

\*110\*

Skidtubes

Skidtubes

Skidtubes

Memo

0.00

\*\*\*VERIFY AND INSPECT THE MATERIAL PRIOR TO USE\*\*\*

1- Bend FWD end of tube using bend prog D3274 FWD and foil 10 as per dwg D3274, cut fwd end of tube with saw table setup D3274.

2- remove fwd indexing ridge as per dwg D3274. Prepare for welding

3- weld fwd cap as per dwg D3274 and QS1004

AR Aluminum Rod Batch: m120854/m122357

4- grind fwd cap weld on top surface only

5- Cut AFT end of tube at 170.9" as per dwg D3274 and deburr end.

6-Drill Aft cap pilot hole using DT8025

7-Claco DT8025 in position and install pilot hole drill Jig DT8742A,B,C,D. Drill 3/16" pilot holes as per Dwg D3274

8-Remove inner indexing ridge on aft end of skidtube as per Dwg D3274 scribe batch #

9-Open aft end cap holes to Ø0.208" as per Dwg D3274. Deburr aft end.

DD 12-11-29

CF 12-12-05

381 12-12-05

SAP 13-01-10

# Work Order ID 93872

November-27-12 8:31:42 AM

\*93872\*

Page 3

Item ID: D206-642-541

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Replacement Skidtube

Start Date: 27/11/2012 Start Qty: 1.00 \*1\*

Cust Item ID:

Required Date: 06/12/2012 Req'd Qty: 1.00 \*1\*

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start \*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

114

QC5- Inspect part completeness to step on W/O

0.00

\*114\*

QC

Memo

0.00

Quality Control

116

QC10- Inspect visual per QSI004- ground welds

0.00

\*116\*

QC

Memo

0.00

Quality Control

120

Chemical Conversion Coat per QSI005 4.1

0.00

\*120\*

HandFinish

Memo

0.00

Hand Finishing

# Work Order ID 93872

November-27-12 8:31:12 AM

\*93872\*

Page 4

Item ID: D206-642-541

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Replacement Skidtube

Start Date: 27/11/2012 Start Qty: 1.00 \*1\*

Cust Item ID:

Required Date: 06/12/2012 Req'd Qty: 1.00 \*1\*

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start \*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

130

QC7-Inspect Chemical Conversion Coat

0.00

\*130\*

QC

Memo

0.00

Quality Control

① SAD 13-01-14

150

Skidtubes

0.00

\*150\*

Skidtubes

Memo

0.00

Skidtubes

1-Open Ø0.313" and 0.375" crossbolt spacer holes as per Dwg D3274

2-Deburr crossbolt spacer holes as per Dwg D3274 and blow out chips from inside the tube

> CF 13-1-14

3-Bond web in place as per Dwg D3274 & QSI 015.

A/RSikaflex-291 M123353

Sikaflex expire date: 13-6-22

Start: 13-1-15 Time: 10:30

Finish: 13-01-22 Time: 11:00

(Adhere for 12 hours)

> CF 13-1-15



Work Order ID 93872

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Item ID: D206-642-541

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Replacement Skidtube

Start Date: 27/11/2012 Start Qty: 1.00

\*1\*

Cust Item ID:

Required Date: 06/12/2012 Req'd Qty: 1.00

\*1\*

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start \*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

160

QC5- Inspect part completeness to step on W/O

0.00

\*160\*

QC

Quality Control

Memo

0.00

170

Skidtubes

0.00

\*170\*

Skidtubes

Skidtubes

Memo

0.00

1-Bend AFT end of tube using bend prog. D3274 AFT as per dwg D3274. Install drop pins in crossbolt spacer holes to maintain web position.

2- DRILL PILOT HOLES FOR WEARPLATES USING D3274-1T2  
OPEN HOLES TO .297" . Deburr

3-DRILL TOE PIN HOLE .640" DIA AS PER DWG USING DT8935 FWD  
END OF TUBE  
DEBURR INSIDE OF HOLE AS NECESSARY (DO NOT ENLARGE HOLES)  
REMOVE ANY FOREIGN OBJECTS INSIDE OF TUBES

4- Countersink crossbolt spacer holes as per Dwg D3274

5- prepare for welding



DP

13-1-16

DC 13/01/16

DC 13/01/21

Work Order ID 93872

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Item ID: D206-642-541

Accept

\*N9000040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Replacement Skidtube

Start Date: 27/11/2012 Start Qty: 1.00

\*1\*

Cust Item ID:

Required Date: 06/12/2012 Req'd Qty: 1.00

\*1\*

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start \*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

180

QC5- Inspect part completeness to step on W/O

0.00

\*180\*

QC

Memo

0.00

Quality Control

190

Skidtubes

0.00

\*190\*

Skidtubes

Memo

0.00

Skidtubes

1-Insert D2649 & D3275-1 crossbolt spacers. Weld as per QSI 004 and Dwg D3274. Remember to back drill each hole before welding the other side. Use aluminum rod

A/RAluminum Rod M122130 BE 13-01-22

3-Grind cross bolt welds flush as per Dwg D3274. → CF 13-1-23

4-Counterbore 5/16" x 0.750" deep as per Dwg D3274 and deburr.

- De 13/01/23

1 0 13-01-21 DAS 18  
1 0 13-01-22 DAS 18

# Work Order ID 93872

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Item ID: D206-642-541

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Replacement Skidtube

Start Date: 27/11/2012 Start Qty: 1.00

\*1\*

Cust Item ID:

Required Date: 06/12/2012 Req'd Qty: 1.00

\*1\*

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start \*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID Tool # Plan  
Code Accept Reject Reject Insp.  
Qty Qty Number Stamp

200

QC5- Inspect part completeness to step on W/O

0.00

\*200\*

QC

Memo

0.00

Quality Control

210

QC10- Inspect visual per QSI004- ground welds

0.00

\*210\*

QC

Memo

0.00

Quality Control

220

Pressure Wash per QSI005 4.3

0.00

\*220\*

HandFinish

Memo

0.00

Hand Finishing

Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch

13-01-24

DA  
09  
2-89

1 13-1-24



# Work Order ID 93872

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Page 8

Item ID: D206-642-541

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Item Name: Replacement Skidtube

Stop \*NS2\*

Start Date: 27/11/2012 Start Qty: 1.00

\*1\*

Cust Item ID:

Required Date: 06/12/2012 Req'd Qty: 1.00

\*1\*

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start \*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

230

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

\*230\*

Powdercoat

Memo

0.00

Powder Coating

START TIME: 12:50  
OVEN TEMPERATURE: 300°  
FINISH TIME: 1:15

1 x 1 1/2 B-1-28

240

QC3- Inspect Part Finish

0.00

\*240\*

QC

Memo

0.00

Quality Control

1 x 1 1/2 13/02/26

250

HandFinishing

0.00

\*250\*

HandFinish

Memo

0.00

Hand Finishing

1-Install Nut Plate as per Dwg D3274. Apply LPS-PROCYON to Nut Plate and rivets.

A/RN/ALPS-PROCYON 11114596

2-Install inserts as per Dwg D3274. Use a drop of Sikaflex inside insert holes a

A/RSikaflex-291 11113944

Sikaflex expire date: 13/06

1 x 1 1/2 13/02/25

Work Order ID 93872

\*93872\*

Page 9

Item ID: D206-642-541

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Item Name: Replacement Skidtube

Stop \*NS2\*

Start Date: 27/11/2012 Start Qty: 1.00 \*1\*

Cust Item ID:

Required Date: 06/12/2012 Req'd Qty: 1.00 \*1\*

Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date:

Run Start \*NR1\*

QC: Date: SPC (Y/N): Date:

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

260	QC5- Inspect part completeness to step on W/O	0.00							
-----	---	------	--	--	--	--	--	--	--

\*260\*

QC

Quality Control

Memo

✓ Inspect Nut Plate & Inserts

270		0.00							
-----	--	------	--	--	--	--	--	--	--

\*270\*

HandFinish

Hand Finishing

HAND FINISHING RESOURCE #1

Memo

✓ 1-Install wearpads & gaskets as per Dwg D3274.

2-Install ring as per Dwg D3274

✓ A/RSikaflex-291 11123904  
Sikaflex expire date: 13106

✓ 3-Inspect for foreign objects as per QSI 024

✓ 4-Spray inside of tube on both sides of web with LPS-3  
A/R LPS-3 Batch: 01A

✓ 5-Install Aft Cap and seal with Sikaflex. Clean excess adhesive.  
A/RSikaflex-291 11123904  
Sikaflex expire date: 13106

1 0 B-228

1 x 0 12102128

Work Order ID 93872

\*93872\*

Page 10

Item ID: D206-642-541

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Replacement Skidtube

Start Date: 27/11/2012 Start Qty: 1.00

\*1\*

Cust Item ID:

Required Date: 06/12/2012 Req'd Qty: 1.00

\*1\*

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start \*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

280

QC5- Inspect part completeness to step on W/O

0.00

\*280\*

QC

Memo

0.00

Quality Control

13228

290

Identify as per dwg & Stock Location: F6073 0.00

\*290\*

Packaging

Memo

0.00

Packaging

DAS  
06  
9-83

13/3/08

300

QC21- Final Inspection - Work Order Release 0.00

\*300\*

QC

Memo

0.00

Quality Control

M05 13-03-06

13-03-06

# Picklist Print

November-27-12 8:31:46 AM

Page 1

Work Order ID: 93872

\*93872\*

Parent Item: D206-642-541

\*D206-642-541\*

Parent Item Name: Replacement Skidtube

Start Date: 27/11/2012

Required Date: 06/12/2012

Start Qty: 1.00

Required Qty: 1.00

## Comments:

IPP Rev:B05.09.23 Revised per D206-642 Rev. JKJ/JLM  
 IPP Rev:C 07-02-23 Added SS Wearplates & Gaskets JLM  
 IPP Rev:D 07-12-06 replace NAS1515H3L to D3672-1 DD  
 IPP Rev:E 08-04-17 as per PAR 08-015 DD verified by:EC  
 IPP Rev:F 08-06-02 add comment DD verified by:EC  
 IPP Rev:G 08-10-09 revise details DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D2600-1-190

Manufactured No

110 Each 83.0000

\*\*

\*D2600-1-190\*

Extrusion Round 3" 206

Location	Loc Qty	Loc Code
----------	---------	----------

HALL	43	
------	----	--

69622	43	
-------	----	--

LG	40	
----	----	--

76912	40	
-------	----	--

Manufactured No

110 Each 21.0000

\*\*

Location	Loc Qty	Loc Code
----------	---------	----------

LG002	21	
-------	----	--

52511	1	
-------	---	--

52647	20	
-------	----	--

Manufactured No

150 Each 4.0000

\*\*

D3282-041

\*D3282-041\*

Float Web (206L/407)

Location	Loc Qty	Loc Code
----------	---------	----------

LG	4	
----	---	--

91988	4	
-------	---	--

393487

12-11-29

0612-12-05

CF 13-1-15

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Page 2

Work Order ID: 93872

**\*93872\***

Parent Item: D206-642-541

**\*D206-642-541\***

Parent Item Name: Replacement Skidtube

Start Date: 27/11/2012

Required Date: 06/12/2012

Start Qty: 1.00

Required Qty: 1.00

D2649

Manufactured No

190

Each

202.0000

12

12

**\*D2649\***

Cross Bolt Spacer

\*\*

Location

Loc Qty

Loc Code

LG001

1

90967

1

LG002

201

82813

40

85586

4

86912

3

88529

15

90333

7

90497

6

91632

120

92194

6

D3275-1

Manufactured No

190

Each

145.0000

12

12

**\*D3275-1\***

Crossbolt Spacer

\*\*

Location

Loc Qty

Loc Code

LG002

145

66930

1

85418

1

87713

143

BE 13-01-22  
B 93663 x12

BE 13-01-22  
B 93947 x12

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Page 3

Work Order ID: 93872

**\*93872\***

Parent Item: D206-642-541

**\*D206-642-541\***

Parent Item Name: Replacement Skidtube

Start Date: 27/11/2012

Required Date: 06/12/2012

Start Qty: 1.00

Required Qty: 1.00

CR3212-4-03

Purchased

No

250

Each

1.640.000

2

2

**\*CR3212-4-03\***

Cherry Rivet

\*\*

11

13/02/28

## Location

## Loc Qty

## Loc Code

ST328

804

114859

210

1114889

x2

123265

500

123301

94

ST331

836

110139

2

119017

834

D3415-041

Manufactured

No

250

Each

13.0000

1

1

**\*D3415-041\***

Nut Plate

\*\*

11

13/02/28

## Location

## Loc Qty

## Loc Code

ST044

13

82151

13

1393330

x1

CCR264SS3-3

Purchased

No

250

Each

468.0000

2

2

**\*CCR264SS3-3\***

Cherry Rivet

\*\*

11

13/02/28

## Location

## Loc Qty

## Loc Code

ST327

468

117849

5

119017

188

122973

73

123265

202

x2

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Work Order ID: 93872

\*93872\*

Parent Item: D206-642-541

\*D206-642-541\*

Parent Item Name: Replacement Skidtube

Start Date: 27/11/2012

Required Date: 06/12/2012

Start Qty: 1.00

Required Qty: 1.00

ALS4-1032-130

Purchased

No

250

Each

389.0000

78

78

\*AI S4-1032-130\* X

\*\*

13/02/28

Insert

AI S4-1032-130

## Location

## Loc Qty

## Loc Code

ST279

389

1124226

x78

119084

116

120671

89

120807

36

120837

8

121269

140

D3536-15

Manufactured

No

270

Each

21.0000

1

1

\*D3536-15\*

\*\*

13/02/28

Gasket

## Location

## Loc Qty

## Loc Code

FG

2

85604

2

FP001

17

86253

9

93199

8

FP002

2

73318

1

81343

1

D3536-23

Manufactured

No

270

Each

24.0000

1

1

\*D3536-23\*

\*\*

13/02/28

Gasket

## Location

## Loc Qty

## Loc Code

FG

2

85295

2

FP002

22

74510

1

83377

1

89928

20

1393982

x1

November-27-12 8:31:46 AM

Shop Packet Print

Page 4

# Picklist Print

November-27-12 8:31:46 AM

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Work Order ID: 93872

**\*93872\***

Parent Item: D206-642-541

**\*D206-642-541\***

Parent Item Name: Replacement Skidtube

Start Date: 27/11/2012

Required Date: 06/12/2012

Start Qty: 1.00

Required Qty: 1.00

D3536-35

Manufactured No

270

Each

26.0000

1

1

**\*D3536-35\***

Gasket

\*\*

u

13/02/28

## Location

## Loc Qty

## Loc Code

FG

2

1393911

x1

89650

2

FP001

1

86251

1

FP002

23

82065

2

90843

8

90844

13

D3536-39

Manufactured No

270

Each

21.0000

1

1

**\*D3536-39\***

Gasket

\*\*

u

13/02/28

## Location

## Loc Qty

## Loc Code

FP001

21

82252

1

85870

7

92160

13

x1

D3535-15

Manufactured No

270

Each

41.0000

1

1

**\*D3535-15\***

Wearshoe

\*\*

u

13/02/28

## Location

## Loc Qty

## Loc Code

FP001

41

85291

2

86230

10

93045

29

x1



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Work Order ID: 93872

\*93872\*

Parent Item: D206-642-541

\*D206-642-541\*

Parent Item Name: Replacement Skidtube

Start Date: 27/11/2012

Required Date: 06/12/2012

Start Qty: 1.00

Required Qty: 1.00

D3535-35

Manufactured No

270 Each

22.0000 1 1

\*D3535-35\*

Wearshoe

\*\*

13/02/28

## Location

## Loc Qty

## Loc Code

FP001

22

1393799

67598

1

70815

1

79849

1

86191

1

90092

5

92343

13

D3535-39

Manufactured No

270 Each

21.0000 1 1

\*D3535-39\*

Wearshoe

\*\*

13/02/28

## Location

## Loc Qty

## Loc Code

FP001

21

69759

1

81359

4

85869

6

87182

10

D3535-23

Manufactured No

270 Each

40.0000 1 1

\*D3535-23\*

Wearshoe

\*\*

13/02/28

## Location

## Loc Qty

## Loc Code

FP001

40

86232

1

89963

13

90518

13

93181

13

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Work Order ID: 93872

\*93872\*

Parent Item: D206-642-541

\*D206-642-541\*

Parent Item Name: Replacement Skidtube

Start Date: 27/11/2012

Required Date: 06/12/2012

Start Qty: 1.00

Required Qty: 1.00

D3537-3 Manufactured No

270 Each

18.0000

1

1

\*D3537-3\*

Wearpad

\*\*

13/02/25

## Location

## Loc Qty

## Loc Code

FG

8

1393366

x1

86237

8

FP002

10

78836

1

90147

9

D3537-1 Manufactured No

270 Each

71.0000

9

9

\*D3537-1\*

Wearpad

\*\*

13/02/25

## Location

## Loc Qty

## Loc Code

FP001

57

1394395

x1

91645

33

91668

24

FP002

14

83254

1

83255

3

87697

1

88562

9

AN960C10L NAS1149C0332 Purchased No

270 Each

21.0000

80

80

\*AN960C10I \* X

washer

11123759

\*\*

13/02/25

## Location

## Loc Qty

## Loc Code

ST245

21

107534

21

AN960C416 NAS1149C0463 Purchased No

270 Each

0.0000

1

1

\*AN960C416\* ✓

washer

1119097

\*\*

13/02/25

November-27-12 8:31:46 AM

Shop Packet Print

Page 7

# Picklist Print

November-27-12 8:31:46 AM

Page 8

Work Order ID: 93872

**\*93872\***

Parent Item: D206-642-541

**\*D206-642-541\***

Parent Item Name: Replacement Skidtube

Start Date: 27/11/2012

Required Date: 06/12/2012

Start Qty: 1.00

Required Qty: 1.00

D3672-1

Manufactured No

270

Each

1,237.000

2

2

**\*D3672-1\***

Phenolic Washer

\*\*

13/02/28

## Location

## Loc Qty

## Loc Code

FG

10

85222

10

FP001

2

80369

2

ST061

1225

72229

4

76277

13

83608

460

85222

268

91325

480

XZ

AN3C4A

Purchased

No

270

Each

2,953.000

80

80

**\*AN3C4A\***

BOLT

\*\*

13/02/28

## Location

## Loc Qty

## Loc Code

FG

20

122814

20

ST350

2751

123759

2751

ST513

182

120187

31

120521

28

120769

38

121205

61

121556

8

122151

2

122416

4

122814

2

123021

8

11/24/28

180

# Picklist Print

November-27-12 8:31:46 AM

Page 9

Work Order ID: 93872

**\*93872\***

Parent Item: D206-642-541

**\*D206-642-541\***

Parent Item Name: Replacement Skidtube

Start Date: 27/11/2012

Required Date: 06/12/2012

Start Qty: 1.00

Required Qty: 1.00

AN4C5A

Purchased

No

270

Each

448.0000

1

1

**\*AN4C5A\***

BOLT

\*\*

u 13/02/2012

Location

Loc Qty

Loc Code

ST355

448

112243

129

119017

6

122599

113

123265

200

X1

D2646

Manufactured

No

270

Each

152.0000

1

1

**\*D2646\***

Aft Cap

\*\*

u 13/02/2012

Location

Loc Qty

Loc Code

FG

2

90495

2

FP002

150

62678

5

68280

5

70945

1

71070

2

73294

1

73825

2

79562

2

81974

10

85443

2

85848

4

90495

16

91189

100

X1

Picklist Print

November-27-12 8:31:46 AM

Page 10

Work Order ID: 93872

\*93872\*

Parent Item: D206-642-541

\*D206-642-541\*

Parent Item Name: Replacement Skidtube

Start Date: 27/11/2012

Required Date: 06/12/2012

Start Qty: 1.00

Required Qty: 1.00

D3413-1

Manufactured No

270

Each

16.0000

1

1

\*D3413-1\*

\*\*

11 13/02/12

Ring

Location

Loc Qty

Loc Code

ST421

12

88025

10

90506

2

ST464

4

80224

4

139117

✓

**DART**

DESIGN <b>CP</b>	DRAWN BY <b>PH</b>	<b>DART AEROSPACE USA, INC.</b> PORT HADLOCK, WA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. <b>D3274</b>	REV. D SHEET 1 OF 4
DATE <b>06.12.19</b>		TITLE <b>SKIDTUBE ASSEMBLY</b>	SCALE NTS
A	04.03.15	NEW ISSUE	
B	04.08.09	MOVE SADDLE HOLE: 42.14 WAS 42.76	
C	05.03.16	ADD -043; NEW INSERTS	
D	06.12.19	NEW INSERTS, SS WEARSHOE + GASKET	

**RELEASED**

07.02.12

**DEO ATTACHED**

Qty -041	Qty -043	Part Number	Description
X		D3274-041	SKIDTUBE ASSEMBLY
	X	D3274-043	SKIDTUBE ASSEMBLY
1	1	D2600-1-240	EXTRUSION
1	1	D2646	AFT CAP
12	12	D2649	CROSS BOLT SPACER
12	37	D3275-1	CROSS BOLT SPACER
1	1	D3282-041	FLOAT WEB
1	1	D3285-1	CAP
1	1	D3413-1	RING
1	1	D3415-041	NUT PLATE
1	1	D3535-15	WEARSHOE
1	1	D3535-23	WEARSHOE
1	1	D3535-35	WEARSHOE
1	1	D3535-39	WEARSHOE
1	1	D3536-15	GASKET
1	1	D3536-23	GASKET
1	1	D3536-35	GASKET
1	1	D3536-39	GASKET
9	9	D3537-1	WEARPAD
1	1	D3537-3	WEARPAD
78	78	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, AELS-1032-130)
80	80	AN3C4A	BOLT
1	1	AN4C5A	BOLT
1	1	AN960C416	WASHER
80	80	AN960C10L	WASHER
2	2	CCR264SS3-3	RIVET
2	2	CR3212-4-03	RIVET
2	2	NAS1515H3L	WASHER

**GENERAL NOTES:**

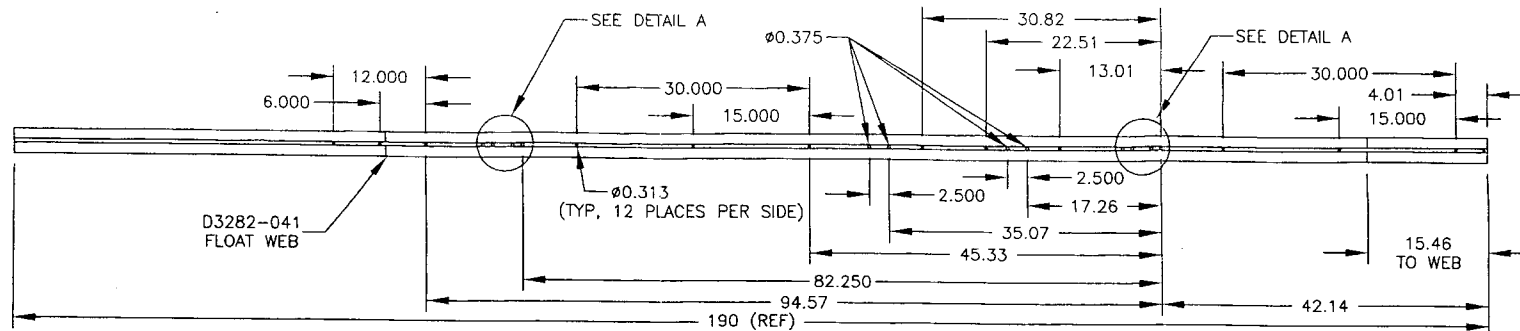
1. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
2. DAMAGE TOLERANCE ON FWD BEND:  
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 7 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
3. ALL HOLES DRILLED ON CENTERLINES.
4. BOND D3282-041 FLOAT WEB INTO D3274-1/-3 OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/291 ADHESIVE PER DART QSI 015. ENSURE HOLES LINE-UP.
5. WELDING TO BE DONE PER DART QSI 004.
6. FINISH: - ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1  
- POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
7. DRILL Ø0.297 HOLES FOR ALS7-1032-130 INSERTS USING DT3274-1T2 BEFORE FINISH. INSTALL ALS7-1032-130 INSERTS AFTER FINISH. SEAL WEARSHOE BOLTS WITH SIKAFLEX -241/-291.
8. SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.

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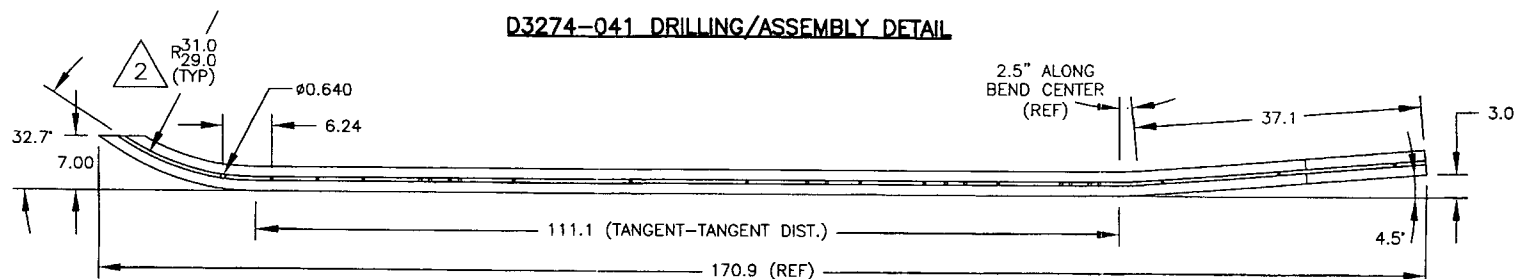
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93872

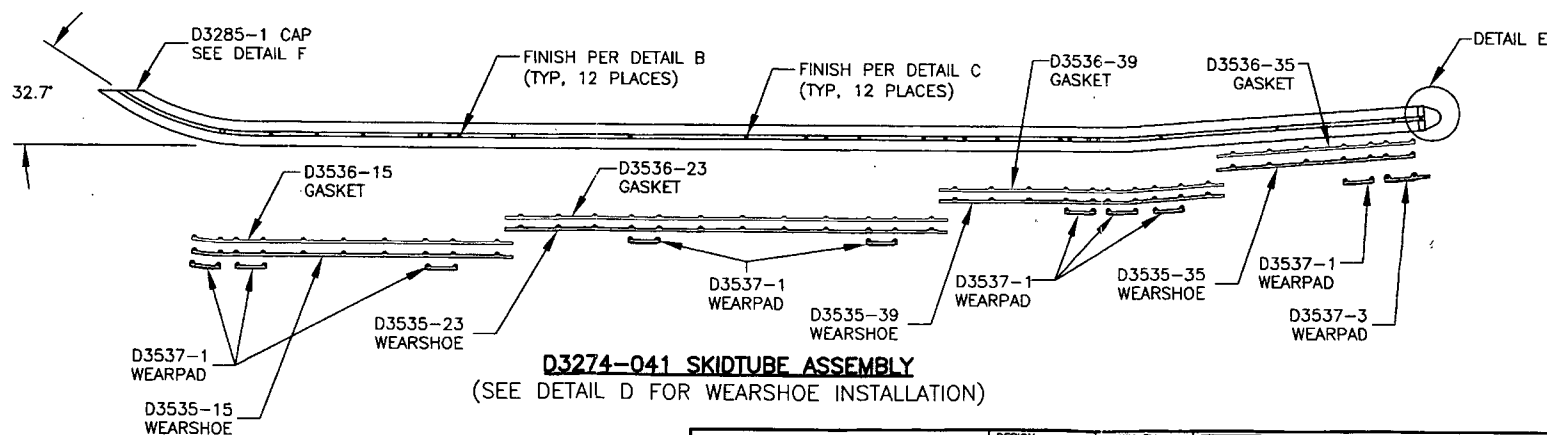
DEO ATTACHED



**D3274-041 DRILLING/ASSEMBLY DETAIL**



**D3274-041 BEND/DRILLING DETAIL**



**D3274-041 SKIDTUBE ASSEMBLY**  
(SEE DETAIL D FOR WEARSHOE INSTALLATION)

RELEASED

07.02.12

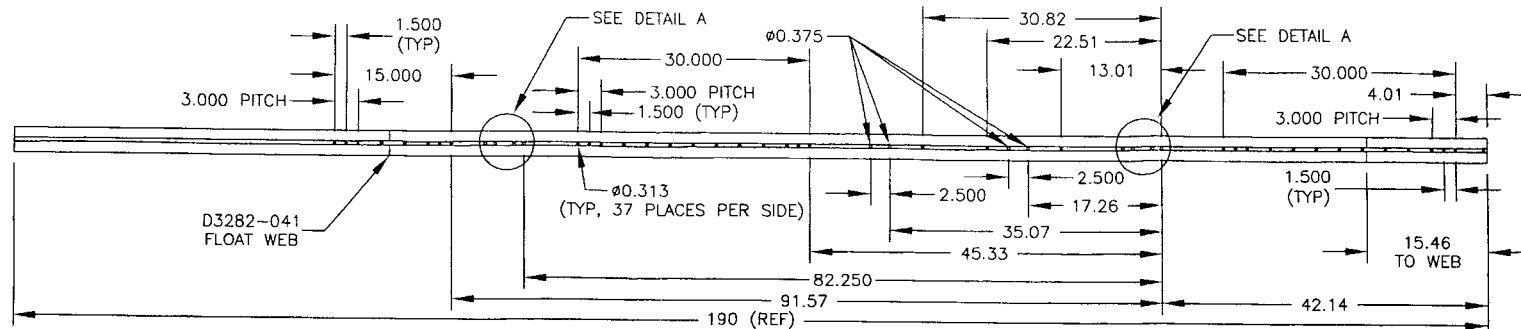
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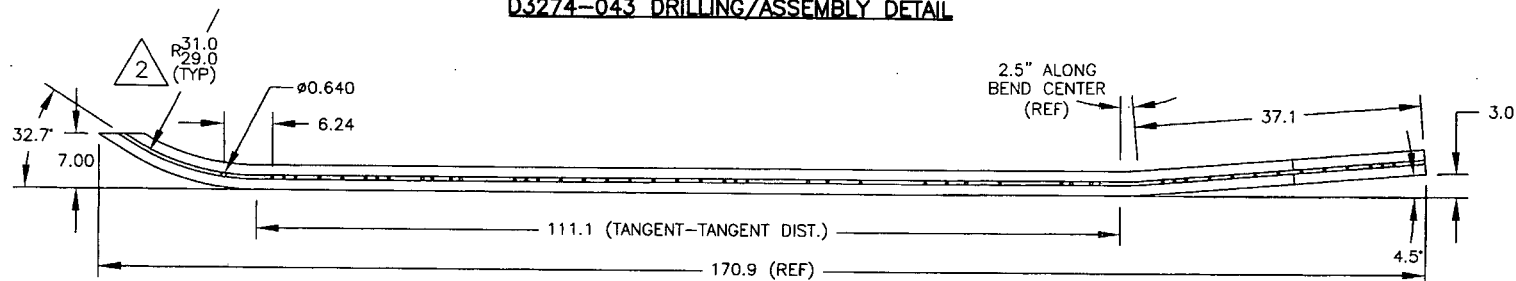
DESIGN	CP	DRAWN BY	PH	<b>DART</b>	DART AEROSPACE USA, INC.
CHECKED	#	APPROVED	#	DRAWING NO.	D3274
DATE	06.12.19	TITLE	SKIDTUBE ASSEMBLY	REV. D	SHEET 2 OF 4
				SCALE	1:15

93872

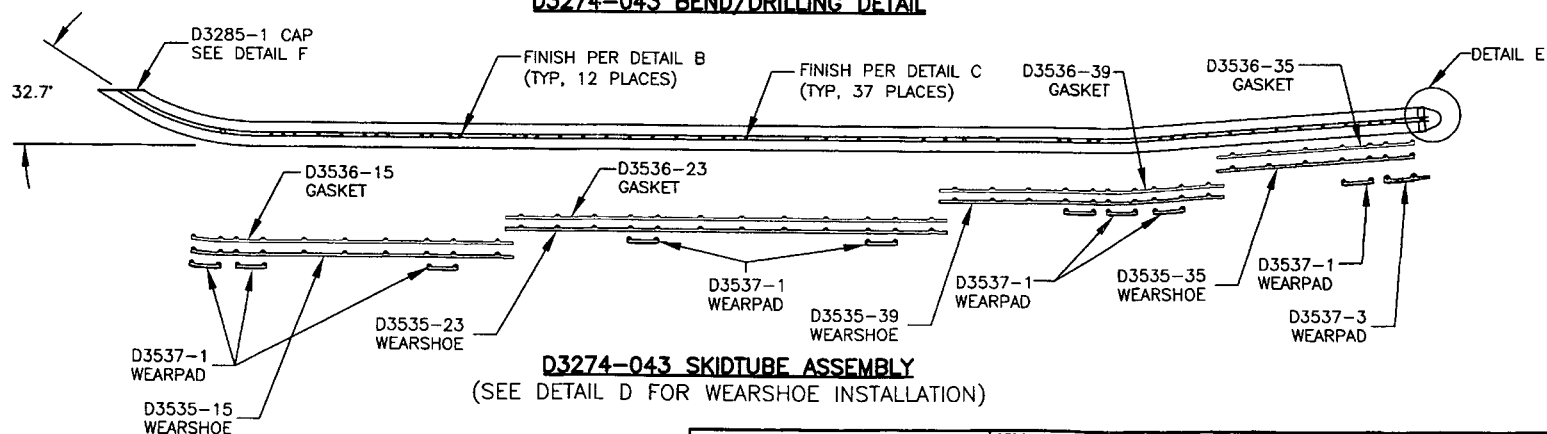
DEO ATTACHED



D3274-043 DRILLING/ASSEMBLY DETAIL



D3274-043 BEND/DRILLING DETAIL



D3274-043 SKIDTUBE ASSEMBLY  
(SEE DETAIL D FOR WEARSHOE INSTALLATION)

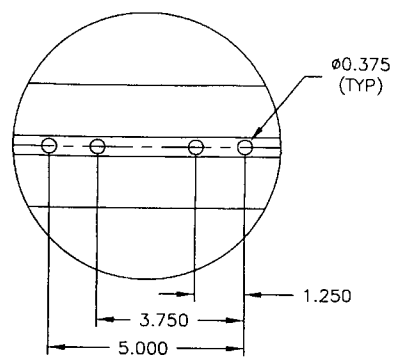
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07.02.12

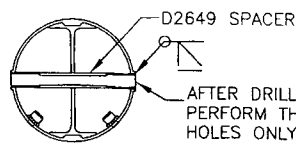
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		DATE	06.12.19			D3274	SHEET 3 OF 4
		TITLE				SKIDTUBE ASSEMBLY	SCALE
							1:15



### DETAIL A: DRILL DETAIL

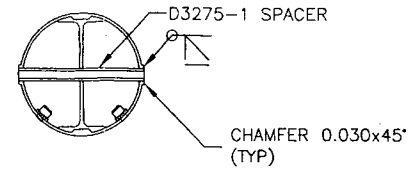


### DETAIL B FOR 0.375 HOLES ONLY

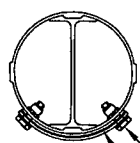


- AFTER DRILLING AND BENDING ASSEMBLY  
PERFORM THE FOLLOWING FOR 0.375  
HOLES ONLY:
1. CHAMFER HOLE 0.030x45°
  2. INSERT D2649 SPACER
  3. WELD INTO PLACE AND GRIND FLUSH
  4. C'BORE TO 0.313x0.75 DEEP

### DETAIL C FOR 0.313 HOLES ONLY

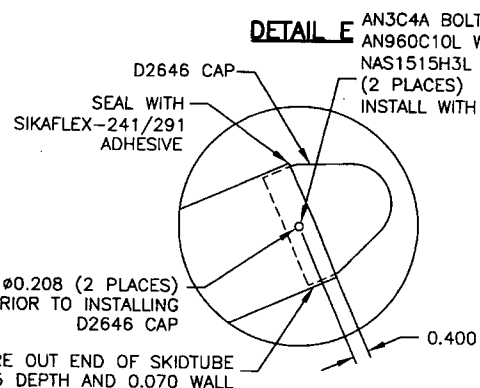


### DETAIL D

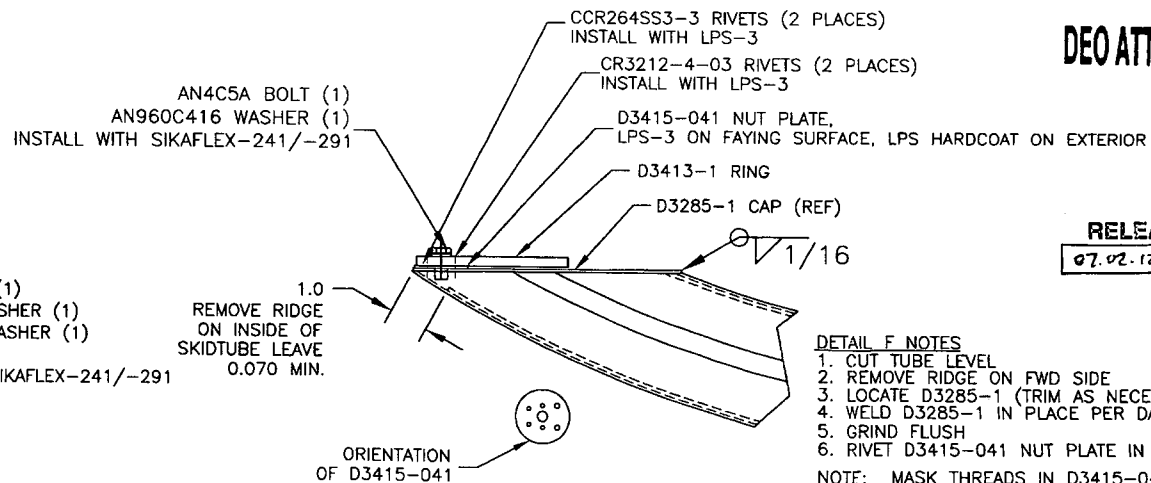


- ALS7-1032-130 INSERT (1)  
AN3C4A BOLT (1)  
AN960C10L WASHER (1)  
(78 PLACES)  
GASKET/WEARSHOE/WEARPAD (REF)

### DETAIL E



### DETAIL F: END FINISHING DETAIL



DEO ATTACHED

RELEASED  
07.02.12

- DETAIL F NOTES
1. CUT TUBE LEVEL
  2. REMOVE RIDGE ON FWD SIDE
  3. LOCATE D3285-1 (TRIM AS NECESSARY)
  4. WELD D3285-1 IN PLACE PER DART QSI 004
  5. GRIND FLUSH
  6. RIVET D3415-041 NUT PLATE IN PLACE
- NOTE: MASK THREADS IN D3415-041  
PRIOR TO FINISH

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CHECKED	CP	APPROVED	PH	DRAWING NO.	REV. D
DATE	06.12.19			D3274	SHEET 4 OF 4
				TITLE	SCALE
				SKIDTUBE ASSEMBLY	1:3

93872

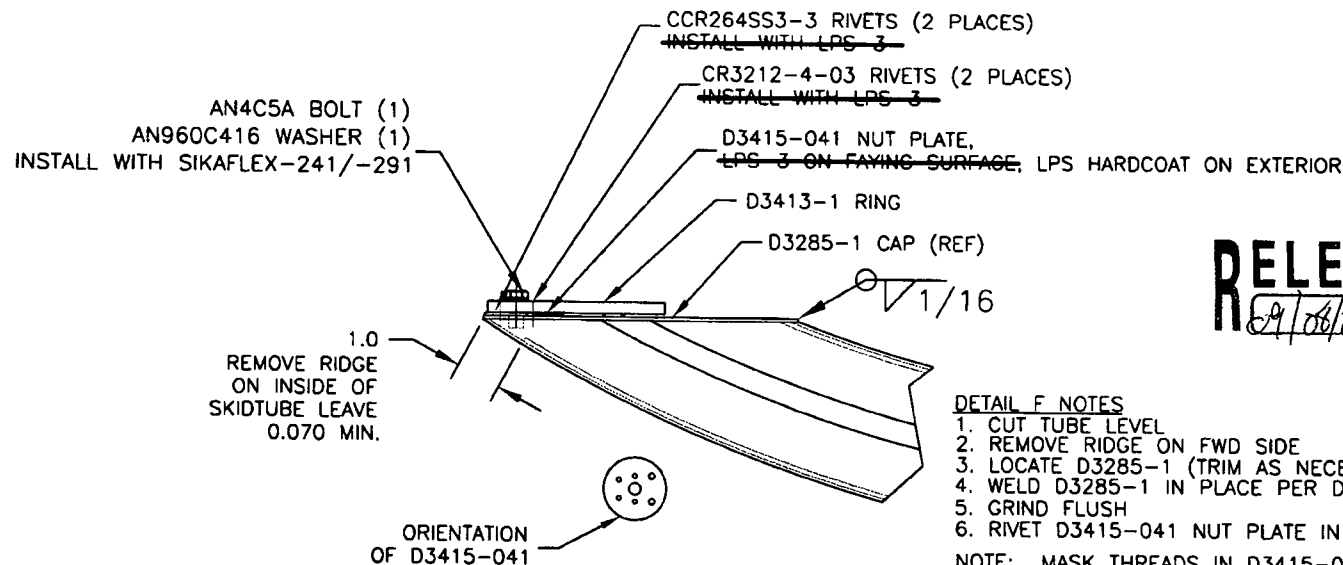
DRAWING NO. D3274	TITLE SKIDTUBE ASSEMBLY	REV. D	DART AEROSPACE USA, INC ENGINEERING ORDER		D.E.O. NO. D3274-D-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN UP	CHECKED	MFG. APPR.	APPROVED		DE APPR.		
DATE 09.06.17	DATE 09.06.23	DATE 09/06/23	DATE 09/06/23		DATE 09.06.23		

LPS-3 IS NO LONGER USED DURING ASSEMBLY OF SKIDTUBE.

AMEND NOTE 8: ~~"SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES 'LPS 3' AFTER FINISH AND INSTALLATION OF INSERTS.~~  
COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES 'LPS PROCYON' AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF  
POWDER COATING WITH MEK DEGREASER."

AMEND DETAIL F AS SHOWN:

### DETAIL F: END FINISHING DETAIL



#### DETAIL F NOTES

1. CUT TUBE LEVEL
2. REMOVE RIDGE ON FWD SIDE
3. LOCATE D3285-1 (TRIM AS NECESSARY)
4. WELD D3285-1 IN PLACE PER DART QSI 004
5. GRIND FLUSH
6. RIVET D3415-041 NUT PLATE IN PLACE

NOTE: MASK THREADS IN D3415-041  
PRIOR TO FINISH



NO. 311

AWS D17.1.2001  
QUALIFICATION TEST RECORD

Name: Barclay Elliott  
Job #: 91072  
Part #: A206-642-151  
Description: Stick  
Welding Process: Tig ☒ Mig ☐  
Base material: Aluminum  
Current: AC ☒ DC ☐

TEST REQUIREMENTS AND RESULTS

Visual:	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Incomplete Penetration:	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Incomplete Fusion:	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Cracks:	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Overlap (cold lap)	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Undercut:	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Pin holes:	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Porosity (surface):	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Coloration:	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Burn through:	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>

Qualifier David Havel Date of Test Coupon 13.01.09  
Welder Barclay Elliott Date of Test Coupon 13.01.09

The above named individual is qualified in accordance with AWS D17.1.2001 to weld